



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ROBERT M. MOORE, JR., ET AL.

SERIAL NO.: 09/451,319

FILED: NOVEMBER 30, 1999

FOR: PREPARATION OF CONCENTRATED  
AQUEOUS BROMINE SOLUTIONS  
AND BIOCIDAL APPLICATIONS  
THEREOF

DATE: February 19, 2002

GROUP ART UNIT: 1616

EXAMINER: A. PRYOR

Commissioner for Patents  
Washington, DC 20231

Sir:

**RESPONSE**

This responds to the Office Action of November 2, 2001. Claims 61-65 are in the application. All claims are rejected.

Claims 61-65 stand rejected under 35 U.S.C. 103(a) for the reasons of record and because Goodenough et al (U.S. 3,558,503) discloses the instant process at pH 8-10 and Applicants' have not shown unexpected benefits for a pH of 12-14. These rejections are traversed.

Consider the latter rejection first. One of the central features of Applicants' claimed process is a specific order of mixing, i.e., the bromine is mixed with (added to) an aqueous solution that was formed from water, sulfamic acid and alkali metal base. This order of mixing or addition is an important feature as it provides for the presence of the sulfamate component (sulfamic acid + alkali metal base) during the bromine addition so that the hypobromite formed by the added bromine and mixture water will immediately "see" stabilizing sulfamate before the